

# INFORMATION

## ATS States Policy on BCG

Vaccination with BCG does not provide complete protection against tuberculosis and, until further controlled studies are conducted, cannot be recommended for the general population. However, since it appears to provide some degree of protection, its use is recommended for members of groups constantly exposed to tuberculosis if they have a negative reaction to the tuberculin test.

These conclusions are contained in a report submitted by the Chemotherapy Committee of the American Trudeau Society, Medical Section of the National Tuberculosis Association, to the ATS Executive Committee in January, and adopted by the latter as a statement of policy on BCG.

The complete report follows:

The members of the Society and other physicians in the United States have been interested for many years in the active immunization against tuberculosis with BCG. The expansion of public health activities in the field of tuberculosis control by official and voluntary agencies and the acquisition of new knowledge concerning immunity in tuberculosis have prompted the American Trudeau Society to make the following observations and recommendations:

I. BCG vaccine, prepared under ideal conditions and administered to tuberculin negative persons by approved techniques, can be considered harmless.

II. The degree of protection reported following vaccination is by no means complete nor is the duration of induced relative immunity permanent or predictable. The need for further basic research on the problem of artificial immunization against tuberculosis is recognized and is to be emphasized. Studies should be directed: (a) toward the improvement of the immunizing agent, (b) to the development of criteria for vaccination and revaccination and (c) to determine more accurately which groups in the general population should be vaccinated. Several well controlled studies are under way at the present time and it is expected that others will begin within the near future.

III. On the basis of studies reported in the European and American literature, an appreciable reduction in the incidence of clinical tuberculosis may be anticipated when certain groups of people who are likely to develop tuberculosis because of unusual exposure, inferior resistance, or both, are vaccinated.

A. In the light of present knowledge, vaccination of the following more vulnerable groups of individuals is recommended, provided they do not react to adequate tuberculin tests.

1. Doctors, medical students and nurses who are exposed to infectious tuberculosis.

2. All hospital and laboratory personnel whose work exposes them to contact with the bacillus of tuberculosis.

3. Individuals who are unavoidably exposed to infectious tuberculosis in the home.

4. Patients and employees of mental hospitals, prisons and other custodial institutions in whom the incidence of tuberculosis is known to be high.

5. Children and certain adults considered to have inferior resistance and living in communities in which the tuberculosis mortality rate is unusually high.

B. Vaccination of the general population is *not* recommended at this time except for carefully controlled investigative programs which, as a rule, will be best carried out under the auspices of official agencies such as the U. S. Public Health Service, state and municipal health departments and other especially qualified groups.

IV. BCG vaccine should not be made available for general distribution in the United States at this time because: (a) the most effective strain of BCG has not been agreed upon nor has fully satisfactory standardization of the vaccine been achieved, (b) the best qualified experts have not agreed as to the most effective method of vaccination and (c) fully satisfactory arrangements have not been perfected for transportation and storage of the vaccine.

The vaccine should be prepared only in accredited laboratories especially devoted to this task, in which virulent tubercle bacilli are not cultivated or handled and in which all other possible precautions are exercised to assure safety and quality of the product.

Adequate record systems should be devised for management of the statistical problems involved in recording and following large numbers of vaccinated people. These and other problems of particular importance are now being studied on an extensive scale by official and voluntary agencies in the United States and in close collaboration with European scientists experienced in this field.

V. The Society believes that since BCG vaccination affords only incomplete rather than absolute protection, the most effective methods of controlling tuberculosis in the general population are: (a) further improvement of living conditions and the general health, (b) reduction of tuberculosis infection, which can be accomplished by modern public health methods and the unremitting search among presumably healthy individuals for patients with infectious tuberculosis, (c) prompt and adequate medical and surgical treatment of patients with active disease, (d) segregation and custodial care of those not amenable to accepted forms of therapy and (e) adequate rehabilitation.

### SIGNIFICANT ADVANCES

Fortunately, great advances have been achieved during recent years in the development of diagnostic methods applicable on a mass scale and there have been significant improvements in the surgical and medical treatment of tuberculosis. The expansion of modern diagnostic, therapeutic and rehabilitation

facilities is required at this time to make full use of these new methods which can accomplish further dramatic reduction of tuberculosis mortality and morbidity rates in the United States.

It is to be emphasized that BCG vaccination must not be regarded as a substitute for approved hygienic measures or for public health practices designed to prevent or minimize tuberculous infection and disease. Vaccination should be regarded as only one of many procedures to be used in tuberculosis control. Vaccination seems unwarranted: (a) in areas in which the tuberculosis mortality rate is extremely low and (b) in localities in which the tuberculin test is of especial value as a differential diagnostic procedure.

## Irwin Memorial Blood Bank

Although the total number of donors accepted by the Irwin Memorial Blood Bank of San Francisco in 1947 was 21.5 per cent greater than the total for the preceding year, more are needed to fill increasing demands, according to a report signed by Anthony J. J. Rourke, M.D., chairman of the Physicians of the Blood Bank Commission.

The Bank, which was founded in 1941 by the San Francisco County Medical Society, is operated as a non-profit organization to provide transfusion service to over 55 hospitals serving a population of more than one and a half million in San Francisco and Marin Counties. Recently the Bank has received an increasing number of requests to extend the service to other areas.

Purposes of the Blood Bank are:

1. To provide whole blood and plasma at cost to patients in need of such therapy.
2. To be certain blood transfusions were available for all patients regardless of their ability to pay the service fee or provide donor replacements.
3. To process and distribute plasma to ships of allied nations and in addition to create a plasma reserve for the people of San Francisco.

In serving these purposes, the Bank at present is taking blood from between 1,900 and 2,000 donors a month and distributing over 1,800 units of whole blood and plasma to hospitals. In 1941 when blood was procured from 200 donors and hospitals were requesting 50 to 100 units a month for patients.

The management of the Blood Bank sets forth the following ways by which a fresh, adequate supply of blood can be maintained through donations:

1. *Bank Deposits.* Donors may deposit blood to aid the Bank and its humanitarian work. These deposits help keep a surplus in the refrigerator for patients in need. A donor contributing to the "Bank" is given a credit for a period of one year and during that time, the credit is available for relatives or friends as replacement for blood provided by our Bank upon the authorization of the donor.

2. *Reserve Funds.* Many business firms, societies and fraternal organizations are encouraging members to start a Reserve Fund with the Blood

Bank. All deposits to a Reserve are held for a period of one year and when any member of the organization or his immediate family is in need of a transfusion, the replacement is debited from the Fund upon the authorization of the Reserve Fund Chairman. Funds are kept active by the regular periodical donations of the members; and, in this way, stocks of fresh blood are materially aided. This worthwhile plan has great appeal and the Bank directors ask your cooperation and assistance in encouraging Reserve Funds.

3. *Hospital Replacements.* Donors deposit blood to replace units supplied patients having blood transfusion therapy in local hospitals.

Not every donation given to the Bank may be used. The Bank occasionally suffers losses as indicated below:

1. Not every donor can give a full pint of blood, yet full credit is given.

2. All blood drawn does not meet the standards of our laboratory tests, although full credit is given the donor.

3. The Bank must stock all four types of blood, yet does not specify the donor must be a certain type when making replacements. Often the donor does not have the type immediately required by the Bank, making it necessary to have additional donations.

*The Irwin Memorial Blood Bank does not buy or sell blood.* When blood is supplied to a patient by the Bank, a service fee of \$6 is charged for each unit of whole blood provided. This is the actual cost of drawing, preparing, packaging and transporting the blood from the Irwin Memorial Blood Bank to the hospital. In addition to this service fee, each unit of blood withdrawn from the Bank must be replaced in order that blood may be available for other patients in need of transfusion. To insure a blood donor replacement, the hospital charges the patient a \$25 "professional donor fee" for each unit, making the total cost of transfusion \$31. In order that the \$25 professional donor fee may be refunded to the patient, the blood must be replaced by the *patient's family or friends*, or by a *previously established Reserve Fund or Bank credit*. Should this procedure not be followed, the hospital must pay a donor the professional fee to make the replacement and the patient, therefore, forfeits all claim to a refund. The Blood Bank, the hospital and the patient's physicians encourage voluntary replacements in order that the patient may take advantage of a transfusion for the low cost of \$6. This replacement plan constitutes a great monetary saving that was not possible in the time before non-profit Blood Banks were in operation and the cost of transfusions was often \$50 to \$75.

To keep the Bank in operation, the services of a paid staff of 28 professional and technical employees are required. In addition, a corps of 65 volunteers per week is needed to deliver blood to the hospitals, prepare sterile supplies, serve in the canteen and act as hostesses. New recruits to the volunteer group are sought. Persons desiring to donate their services are requested to telephone the Blood Bank. Donors also are needed. The number is WALnut 1-5600.